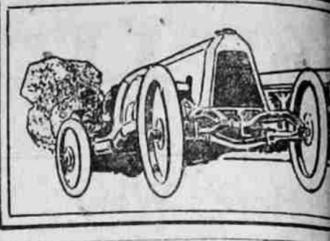


# The Ogden Standard-Examiner AUTOMOBILE NEWS



## Millions Made On Auto Industry During 1921

Experts Wonder if 1921 Will Surpass 1920 in Output of All Makes of Gas Buggies; 2,000,000 Cars Manufactured During Past Year

(N. E. A. Staff Special)  
WASHINGTON, Jan. 14.—It was a hot pace the automobile industry set for itself last year—in production, in invention, in public buying.  
Will that pace be maintained in 1921? Will the 1920 production of more than 2,000,000 motor vehicles be equaled this year? The dozen or so innovations in automobile design and manufacture—will they be surpassed in number and significance in 1921? Or, has the industry reached its pinnacle of efficiency and importance in the view of the automobile designer?  
There is no doubt that, in spite of the remarkable advancement of motor car manufacture in the last few years, there is still much room for further development. Important mechanical improvements have been made the last year, but engineers point to several parts of the automobile that need their attention toward making the car completely efficient. And until this point is reached, the automobile industry will not have achieved the height of distinction toward which it has been striving.

### VALUE OF INDUSTRY

In the past year, the automobile industry has grown in value to about \$2,900,000,000. Only twenty years before the whole existing industry totaled an investment of less than \$600,000.  
Last year, more than any previous year, the motor car industry was in its glory. Demand for automobiles leaped far beyond the supply, but that did not delay the efforts of the manufacturers to increase the efficiency and beauty of their products. Their minds were directed during the year mostly toward perfecting the mechanical gasoline for the automobile buyer.

There is the Packard fuelizer, a product of 1920, which may be regarded as the most important innovation of the year. Designed to prevent carbonization, to save fuel and start a cold engine almost at the moment the starter pedal is pushed, the fuelizer has proved its effectiveness from the beginning. It is now being used exclusively on Packard automobiles, but in a short time its manufacturers promise it will be produced in sufficient quantity for general sale.

### AVOIDING A COLD ENGINE

The difficulty of starting and warming up the engine on cold days has been a serious problem for practically every car on the market. But nearly all seem to be based on the scheme of jacketing the intake manifold with chambers through which the hot exhaust gas may pass.  
"Hot spots" the chambers are called. In some engines, only a spot here and there is heated, in others the whole intake manifold is enclosed in an exhaust jacket.  
Ignition experts are trying to get a spark by means of igniting even the heaviest portion of the fuel and so overcome much of present engine trouble. A system of double ignition having two or three times the present effectiveness is what the engineers are working on.

Another new feature in the mechanical operation of the motor car is the four-wheel brake system. At the recent automobile show in New York, the Duesenberg came out with this innovation. France and England have already had this system included in some of their own models. The Duesenberg brakes are operated by a hydraulic system of oil under pressure controlled by a pedal.

### MORE IMPROVEMENT NEEDED

Automatic chassis lubrication has been developed to the point where it is expected this will soon be included as part equipment of even the medium priced car. Automatic gear shifting is already existent, although it is still in the state of being a novelty.  
What is left for 1921 in the way of mechanical improvement, is still some sort of fuel saving device, an improved system of transmission and the annual feature—a new automotive fuel. The engine is still in its infant state of perfection in spite of the advancement of last year. The transmission has been practically perfected, and engineers agree that the greatest is by far the most backward mechanical unit of the chassis. Improvement of this part of the machine would

greatly enhance the efficiency and value of the car.  
Manufacturers this year will more zealously than ever apply themselves to improvement of the automobile. Last year, in spite of the high for increased output to satisfy the demand, they were able to add features to their products. But the full in purchases that came at the end of last year and still persists, has caused the industry to bend all its energies toward as successful a year as 1920.  
The outlook is encouraging. Motor car dealers expect a renewal of buying immediately after the automobile show, but they are not unaware of the importance of increasing the efficiency of their sales forces as well as improving the mechanics of the automobile. The buying public has again come into its own.

## AUTO RECORDS PLEASE OWNERS

Essex and Hudson Super-Six Attainments Give Him Confidence, Says Hains

"The question is frequently raised," says L. L. Hains, manager of the Ogden Motor Car company, "as to the value of establishing records for a motor car, whether or not it pays to record the car's performance through endurance and reliability, through speed on the speedway, or hill climbs and in cross-country runs against time."  
"Both Hudson and Essex motor cars gained an unquestionable amount of public faith and confidence through records the cars have established. Records alone, of course, have not been responsible for the sales volume but they have contributed in a real measure."  
"People may argue that an automobile is not bought because it can average better than sixty miles per hour on the speedway for over fifty hours. It is true no owner really expects his car to do that for him. He may not even care to know that an Essex crossed America, San Francisco to New York, 3347 miles in four days, fourteen hours, forty-three minutes, or that the type of car he owns holds every local worthwhile record for hill climbs, interstate runs, etc."

"All such accomplishments are made for one purpose only and that is to give the public or the prospective owner confidence in his car. Regardless of whether a man ever wants to exceed twenty miles per hour or not, he still takes pride in the fact that his automobile can do these things, that the same chassis and same power plant beneath the hood of the car that made these new marks against time, are identical with the automobile that he drives."  
"Records do pay. They prove consistency of performance, endurance and reliability in a way that is extremely valuable. They are to the automobile owner what Babe Ruth's latest total is to the baseball fan."

## Ohio Leads U. S. in Number of Autos

When the final records of 1920 are recorded, it will be seen that Ohio ranks first in the number of automobiles.  
New York state is second to Ohio, according to the latest figures, and Illinois and Pennsylvania are running a close race for third place. California will be fifth when the final figures of the year are recorded.

## \$800,000,000 IS 1921 SUM FOR HIGHWAYS

Will Be Washington's Share In Building Better Roads

(N. E. A. Staff Special)  
WASHINGTON, Jan. 14.—Road improvements in the United States in 1921 will cost close to \$800,000,000. That money will pay for rock, dirt, oil and concrete, and the labor and machinery to handle the job.  
The 1920 road bill appropriated almost \$500,000,000—more than \$4.60 for each man, woman and child in the United States. Yet any normal of the public spirit can tell about miles and miles of road that are hardly passable.

Federal officials say that the federal aid system falls short of helping the situation because state highway commissions have exercised jurisdiction over only a small portion of the highways within their respective states.  
The federal officials further assert that state officials have shown little judgment in the expenditure of funds, that the money has not been spent wisely, and that the federal government should pay for all public improvements, instead of the smaller unit of government, the state or county. The national government is shy on money and the result is the very few good highways have been built.

### REMEDIES FOR ROAD ROADS

First—Roads built to endure for years have developed potholes and bumps within a few months. Road builders say the auto and the auto-truck are the cause of this condition. Where is the remedy?  
Three remedies have been suggested:  
1. First—Roads built durable enough to stand any traffic.  
2. Second—Trucks built to a limited size and a law prohibiting the hauling of more than a specified weight over certain roads.  
3. Third—Roads built as strong for any load to travel in and the prohibition of loads exceeding a certain limit on other roads.

The National Automobile Chamber of Commerce maintains that one of the chief road troubles is that automobiles have been built without regard for the road conditions.  
"CO-OPERATION NEEDED."  
They recommend that auto builders work in co-operation. They point out that railroads do not build cars and locomotives and trucks, nor lay track and then put on the track any kind of rolling stock regardless of weight.  
They also warn that railroad building should be applied to road building. They want auto built to fit roads and roads suitable for auto traffic.  
Then there'll be no holes and bumps and the population will not have to pay more than \$4.50 a year to maintain and build roads.

## HERE ARE SNAPPY ITEMS CONCERNING YOUR AUTOMOBILE

Cold and dampness must be excluded so far as possible from the place in which one stores his car during the winter months. They will do great damage to the paint and the mechanical features of the vehicle when it is left to their mercy for a long period. Therefore, it would be a good idea for anyone contemplating laying up his car first to line the inside of his garage with sheeting paper, or at least he should plug up all cracks to make the place as snug as possible.  
Then the really thorough individual will follow up this procedure before locking the door on his car for its long sleep:

1. Wash and thoroughly clean the car and jack it up from under the frame, so that it is placed on wooden blocks under the front and rear springs of support being close up against the two front shackles, both brackets of the front springs, support the chassis in this manner, relieving all weight from the springs and wheels.
2. Remove all tires from the rims and completely exhaust air from the inner tubes and rub them down well with kerosene, sprinkle with French chalk, fold them up perfectly flat, care being taken not to crease them, and place them in inner-tube bags. The bags should be laid down flat. Store both tires and tubes in a dark place.
3. Clean and shade all rims.
4. Drain off water from the radiator and cylinder block. Flush out the radiator with kerosene. The heater block and water pipes, start up motor and run slowly for a few minutes. This will convert any water into steam which might have collected in the water jackets. Replace any plugs removed to drain off the water and close drain cocks.
5. Empty gas tank and drain carburetor.
6. Disconnect electrical cables at battery and remove the battery. Smear ends of cable with vaseline. Fill with distilled water and store in a dry place where there is no danger of freezing.
7. Release clutch by propping open with strip of wood between clutch pedal and floor board.
8. Wipe all mechanical parts of motor and transmission, clutch and steering gear with oil-soaked rag. Cover motor with canvas, burlap or old rag, and wrap up bonnet.
9. Oil all steering joints and connections and wrap up with rag.
10. Fill shackle bolt oil cups with oil and wrap up with rag. Fill and screw down all grease cups.
11. Fry open spring leaves and inject graphite and bantage with rag or canvas.
12. Put the top up and cover the whole car with a dust sheet which will completely cover the car.—Motor Life.

### WATER IN OIL

Oil in the crank case should be kept pure as possible at all times during winter. If water accumulates, there it will freeze and wreck the pipe and pump. Some of the oil, therefore, should be drained off frequently.

## MOTOR TOPICS

(Conducted by Goodrich)  
A novel means of teaching farmers better agricultural methods has been hit upon by the Belgian government: Knock-down school houses are carried into the rural sections by motor cars and set up at suitable locations. After the "better farming" courses are given, the schools are taken down and moved on to another place.

Wisconsin motorists don't intend to be snowed this winter if they can help it. They have circulated petitions throughout the state demanding that the state legislature make adequate provision for keeping the highways open, regardless of the expense. Thousands of persons who do not even own cars have signed up, knowing that open roads are a big asset to the community in general.

Ever stop to think how many spark plugs are used by American motorists each year? You wouldn't guess the number in a year. The total for 1920 is 109,575,710 were made to replace plugs which died in the service of motoring.

Convicts in the New York state penitentiary at Auburn will have a hand in the motoring activities of that state next year. They are making all the state license tags. The total for 1920, 706,999 tags, of which 75,000 have now been finished. The tags have a dark blue background and white numerals.

Road building in South America has been greatly retarded because of the Latin American's belief that the national government should pay for all public improvements, instead of the smaller unit of government, the state or county. The national government is shy on money and the result is the very few good highways have been built.

"Jay-walking" is one of the best ways known for committing suicide. Statistics show that 75 per cent of the pedestrians knocked down and killed or injured by autos last year were hit when crossing the street at some point other than a street intersection. If you must "jay-walk," keep your eyes open and don't blame the motorist if he hits you.

Motor trucks are now playing a big part in transporting the milk supply of the nation. In Wisconsin, trucks are being depended upon to haul practically all of the 8,211,000,000 pounds of milk which is obtained yearly from the 2,000,000 cows in the state. Most of the milk goes to fifty-four condensing plants, creameries, and 2,500 cheese factories.

An increasing number of cities are adopting traffic laws preventing left-hand turns in congested downtown districts, with the result that less delay occurs during the rush hours. Each time an auto cuts through the traffic lane by turning to the left, following machinery are halted. Right hand turns can be made without confusion.

The United States bureau of public roads will pay particular attention this winter to its snow removal activities to the highways which carry the heaviest driveway traffic. Statistics are being gathered showing the amount of travel on these roads and as soon as this is complete bulletins will be sent our urging state and county authorities to keep them open.

## MILLIONS PAID IN AUTO TAXES

Chamber of Commerce Asks U. S. to Make Revision on Excise Taxes

WASHINGTON.—In his annual report, Secretary of the Treasury, Mellon, has made specific recommendations for raising the \$5,000,000,000 which is considered necessary for running the government next year. The heavier the tax recommendations which are of special interest to the automotive industry are:  
1.—Increase the tax on automobiles from 5 per cent to 10 per cent, which it is estimated will make an increase of \$100,000,000.  
2.—Federal license of cars based on 50 cents per car, 100,000,000.  
3.—Excise tax on gas, 10 cents per gallon, 50,000,000.  
4.—The truck sales tax will be continued at 2 per cent, despite efforts to have it eliminated.

New taxes from industry, \$20,000,000. Secretary Mellon is about what those of the industry who are familiar with the tax tendencies expected in his recommendations. They are practically the same as those recommended in the preliminary report of the national industrial conference board. When this report was brought up for hearing recently at a New York meeting of the board the national automobile chamber of commerce intervened before the hearing and these recommendations were revised. It was then shown that the automotive industry pays taxes in the following amounts:

- Excise taxes on motor car sales, \$77,000,000
  - Excise taxes on truck sales, 14,000,000
  - Excise taxes on parts and accessories, 62,000,000
- Present taxes, \$153,000,000

### ORGANIZED FOR SAFETY

Massachusetts has a state roads federation interested in the cause of preventing highway accidents. It includes in its membership clubs, automobile insurance companies, chambers of commerce and boards of trade, women's organizations and others concerned in safety on the highways.

## DESIGN MODEL ACCIDENT AND THEFT LAWS

Safety and Auto Bodies Draft Uniform Code for States

(N. E. A. STAFF SPECIAL)  
WASHINGTON, Jan. 14.—Uniformity among the states in traffic regulations and automobile theft prevention is being sought by the automobile and safety organizations of the country. The national conference on highway traffic regulations, consisting of representatives from the national safety council, the National Automobile Chamber of Commerce and its allied clubs, and other associations interested in the matter, has drawn up a model traffic code to be presented for adoption by the 48 states.

WHI MAKE STREETS SAFE.  
This code has been designed for the purpose of reducing deaths and injuries from automobile accidents, relieving city courts crowded with traffic violation cases, saving millions lost annually in property damage due to traffic accidents, and speeding up traffic in congested districts by making it possible for the motorist to know the proper thing to do and how to do it.

The proposed law requires every person to pass a test before he is permitted to operate an auto.  
It fixes speed limits for congested districts, residence districts and country roads.  
It requires manufacturers to equip autos with non-glare headlights.  
It establishes a vehicle department employing deputies to see that the law is enforced.

TO CURB AUTO THEFTS.  
The uniform anti-theft law requires licensing of all dealers in used cars and parts. They are also obliged to keep complete records of all sales, purchases and exchanges.  
Garage owners and repairmen must keep records of all persons who bring in motor vehicles for storage and repair.  
The law also makes it unlawful to buy or sell an auto without a certificate of title to make it harder to dispose of stolen vehicles.

Heavy penalties are provided for infringement of the law.  
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The law also makes it unlawful to buy or sell an auto without a certificate of title to make it harder to dispose of stolen vehicles.

## CLEVELAND TO ENFORCE RULES

Automobile Sins Listed by Safety First Committee: Look 'Em Over

CLEVELAND, Ohio, Jan. 15.—The Cleveland safety council has made a list of eighteen deadly sins that motorists have been known to commit in violating traffic ordinances. These are furnished by the new city police auxiliary, which has been organized to report auto drivers who are seen breaking the rules of the road.

- 1.—Drove on wrong side of street.
- 2.—Created hazard by excessive speed.
- 3.—Recklessly drove in front of moving street car or other vehicle.
- 4.—Recklessly passed street car while talking on or discharging passengers.
- 5.—Passed street car to left.
- 6.—Drove through safety zone.
- 7.—Rid of street car near pedestrians or vehicle at crossing.
- 8.—Slow moving vehicle failed to keep as close to curb as possible.
- 9.—Passed another vehicle to right.
- 10.—Failed to signal change of direction when slowing down or stopping.
- 11.—Started from curb into traffic without notice.
- 12.—Made solid half or slow down when nearing crossing or curb with obstructed views.
- 13.—Cut corner.
- 14.—Driver continued on after accident.
- 15.—Front or rear lights out.
- 16.—Glaring headlights visible or missing.

## FRANCE PLANS TO OPERATE OWN GAS STATIONS IN 1921

Gas stations, so popular in the United States, will soon be seen all over France, if the plans of the minister of public works of that country are carried out. Instead of being private enterprises, however, the proposed depots will be owned and operated by the French government.

Government engineers are already working on the project and drawing up plans. The new system is expected to bring relief in comfort and expense to the automobile motorists of France.  
One still buys gasoline in gallon tins in France, when he can find it and has the price—12, 15 or 18 francs for 5 liters, a little more than a gallon. Convenience and reduced price are expected to result from the use of the government gasoline depots.

### DECRYSTALLIZING

Travel over rough roads causes crystallization of various parts, with subsequent breakage, especially of steering rod spindles. To avoid this trouble, once a year the spindle should be removed, heated to a cherry red and then retempered.  
Telephone repairmen working in the Sacramento canyon in California, use their families with them to work. Moving from place to place, their homes on three trailers, with all home accommodations, the workers have formed a miniature village on wheels.

## Motorists Should Learn To Diagnose Car Trouble

Gas Line From Tank Is One of the Leading Trouble Makers. Other Ailments Often Cause Motorist to Seek Aid From Good Samaritan

When the motor of Mr. Motorist stops dead, the first question he usually asks himself, either in plain or profane language, or both, is "How did it get that way?"  
He may ask himself that, but he may question his passengers, passers-by, or he may stop innocent, passers-by to get them into an argument. Sometimes he gets busy and finds the trouble, thus answering his own question, sometimes he gets some good passing Samaritan to come and see why the wheels won't go round. What every motorist should learn to do is diagnose his own car's ailments.

The gas line from the tank to the carburetor is one great trouble maker. Dirt, water and rust from the tank will get into this thin line and cause all kinds of worry before the actual trouble is discovered. When the motor stops from a stopped road pipe, the only thing to do is to clean it out. But how? Suppose your engine quits with some funny sounds from the direction of the carburetor. First, see that there is gas in the tank and if there is, your trouble is a dirty carburetor or a clogged gas line. Open the pitcock at the bottom of the carburetor and see if gas is in the float chamber. No gas coming out? Well, disconnect the gas line leading to the carburetor and if gas comes out, the trouble is a clogged screen just in front of the line connection. Here is where many gas lines become clogged. To clean strainer, unscrew plug and drop connection, remove dirt until flow is free and then make connection again. If then the gas does not flow, the trouble is farther back, probably in the screen right at the gas tank, near the water pocket. Clean this out by disconnecting. Clean this out trouble can be eliminated by draining the tank occasionally through the petcock provided for that purpose, under the gas tank.

### PROVIDE TANKS

Cars provided with vacuum tanks have another strain on top of the vacuum tank where the gas line connects. To clean this strainer make disconnection in usual manner, the loosened coupling and line discovering the vacuum tank. If convenience and economy all strainers are clean and no gas comes, disconnect the line and blow through the pipe. Sometimes a mighty blast from compressed air is necessary to completely free the line of all dirt. A dirty gas line is seldom noticed, particularly on cars with no vacuum tank, until one starts uphill. Then the motor sputters like a cat. The line needs attention. On cold mornings a little attention to the carburetor will prevent trouble. If the engine sputters and pops, adjust carburetor by closing air valve one eighth turn.

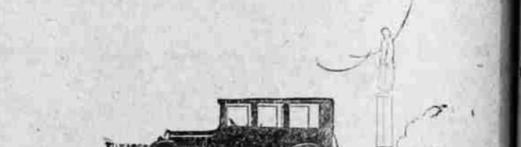
### IGNITION TROUBLE

The other reason for a sudden sputter or a spit, ignition trouble is a case when the motor dies without a murmur of a spit. Ignition trouble may be caused by neglected conditions, loose or exposed wires, loose fitting brushes, loose battery connection, or circuit breaker not breaking right. If ignition runs from the battery, test the system by stepping on starter and watching dial on dash. If armature does not quiver and the starter does not kick, look at your battery connection, particularly the radiator.

### CLEAN COOLING SYSTEM

Clogging of the cooling system may be prevented by cleaning it at least twice a year with hot soda. Dissolve about two pounds of it in hot water and pour into the radiator, running the car as usual. After a day's drain the radiator and fill with the water, changing the water again next day. This will remove the scale that forms in the system, especially the radiator.

## A jaunt in an Oakland Sedan gives an idea of the great usefulness for which this car is fitted. Highly powered, scientifically balanced, it pursues a steady, pleasant course through traffic, on country roads, over hills and when inclement weather is added to the other conditions encountered.



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